Revised Task Statement of Work

Contract 50-YABC-7-66030
Task 46-YABC-8-00004

Task Title: Computer-Assisted Clerical Person Matching Software for Integrated Coverage Measurement Evaluations

COTR Name:
     Phone:

Period of Performance: Two weeks from award date to **February 12, 1999**

Contractor:

Background and Purpose

The Census Bureau is currently conducting the Census 2000 Dress Rehearsal in three locations across the country. The sites are Sacramento, California; Columbia, South Carolina and eleven surrounding counties; and Menominee County, Wisconsin, including the Menominee American Indian Reservation. The Census 2000 Dress Rehearsal Integrated Coverage Measurement program is a series of data collection and processing operations that will provide a measurement of the net undercount and be used to produce an accurate one-number census. The central component of the Integrated Coverage Measurement (ICM) is an independent re-enumeration of about 35,000 of the estimated 407,000 households in the three census dress rehearsal sites. Persons obtained from the initial phase questionnaire are computer matched to those persons reported in the ICM. A three stage clerical matching operation is done in the Before Followup matching phase to find additional matches the computer was not able to identify. Persons not able to be matched are sent to the field for a followup interview. An additional three stage clerical matching operation is conducted in the After Followup matching phase to assign census day residency status for all persons listed in the two enumerations.

A comprehensive evaluation program has been designed to validate the plans for Census 2000, including the ICM component. Two of the evaluation projects require the use of a computer-assisted clerical matching system. The first project, the Evaluation of Outmover Tracing and Interviewing, requires matching for about 6 percent of the entire ICM sample. Multiple match codes per record are required to be entered in the system. The second project, the Error Profile for Census 2000 Dress

Rehearsal, requires two matching operations for a 20 percent subsample of the ICM block clusters. The two matching operations are the Matching Error Study and the Evaluation Followup Interview Study. Each matching operations require multiple match codes and information from followup forms be entered.

Task Requirement

There are several tasks required for this statement of work. All computer interface work should be done using a PC platform. Once test files are delivered, development work should continue on site, here at the Census Bureau, since the test data is protected under Title 13. The necessary tasks are to:

Activity 1

> Develop an interface system that will allow clerical staff to do queries and searches to facilitate clerical matching. This involves such things as being able to:

- view, on screen, records that have been linked previously
- link additional records as matches
- unlink records
- **go to the next address or search for the next address that needs work**
- **perform duplicate searches and coding for ICM and Census records**
- **display ICM supplemental records**
- **perform outlier coding for specific ICM and Census records**
- **compare production and Matching Error Study match codes and allow for final reconciliation coding**

The software requires unique, study-specific functionality in the following areas:

- **Data importing**
- **Data exporting**
- **Cluster selection**
- **Cluster closeout**
- **Person matching**
- **Match coding**
- **Reconciliation**

> In addition, the system should have print functions. This computer-

assisted system will reside on personal computers that contain other systems and this system must integrate with those systems.

Activity 2

Develop a process to update the files with the match codes clerically assigned. Also, give headquarters staff access to these files after the final stage of matching.

Activity 3

Deliver two final analysis files, one for the Outmover Tracing matching and a combined file for the Matching Error Study and the Evaluation Followup Interview Study, with all of the appropriate match codes and other necessary information.

Activity 4

Provide documentation and basic training of the functionality of the system.

Activity 5

Deliver multiple analysis files for each of the three studies. The files are cluster level files which should contain all of the appropriate match codes and other necessary information.

Deliverables

A. A planning meeting to be held within one week of the task award.

B. Regularly scheduled work meetings to discuss the progress of the work and to communicate the details of the work so that the Census Bureau can finalize its clerical matching procedures.

C. An interface system that will also allow clerical staff to view the status of individual records on the Evaluation File and to link or unlink records and enter match codes into the Evaluation File following clerical matching.

D. Two final analysis files with all records and all match codes from the various stages of processing.

E. The software code and documentation for the systems developed for this project.

F. **Cluster level files for each of the three studies (for a total of approximately 3,000 files) with all records and match codes from the various stages of processing.**

Milestone Schedule

Post-award Planning Meeting	One week after contract is awarded		
Work meetings to discuss requirements and progress	weekly		
Contractor develops interface system	08/03/98 - **12/02/98**		
Contractor demonstrates and provides basic training to HQ personnel on functionality of interface system	**12/02/98**		
Matching Operations	**Outmover Tracing**	**Matching Error Study**	**Evaluation Followup**
Contractor receives clerical matching files	**01/04/99**	**12/03/98**	**12/03/98**
Contractor attends clerical matching training session	**01/11/99**	**12/16/98**	NA
Conduct Clerical Matching Operation	**01/11/99 to 01/15/99**	**12/16/98 to 12/30/98**	**12/21/98 to 01/05/99**
Contractor delivers final analysis files	**01/20/99**	**01/08/99**	**01/08/99**
Contractor delivers software code and documentation for system	**02/12/99**		

Government-Furnished Equipment *(if contractor is working onsite)*

> Software and documentation of similar interface systems developed here at Census (if available)
> Detailed time and activity schedule
> Clerical matching specifications from similar systems developed here at Census, including a detailed list of all person match codes

> Files from a previous census test ICM or from the Census 2000 Dress Rehearsal ICM to be used in testing

> Two input files from the Census 2000 Dress Rehearsal ICM, one for each of the two major projects

Travel Requirement *(if outside local area)*

The contractor will be required to travel to the Census Bureau in Jeffersonville, IN to install the computer interface system. In addition, attendance at clerical matching training sessions in Jeffersonville, IN is also required.

Skill Requirement

Staff must have experience writing interface software and search and query systems to assist with clerical matching. Also required is experience taking technical specifications and building statistically sound software from those specifications.

Task Performance Evaluation Criteria (Performance Measures)

In order to determine if the contractor is meeting the stated objectives and tasks set forth in this statement of work, the following performance measures will be used:

A. After we have negotiated a time schedule, we will measure the contractor's ability to meet negotiated dates. Successful product delivery will be measured as a function of the timing. All required deliverables that deviate from the schedule by less than one week would be considered a satisfactory performance.

B. The interface system would be considered satisfactory if the functionality requirements are working as specified.

C. The documentation provided for the interface system would be considered satisfactory if it is complete and easy to find information.